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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/615,772

07/10/2003

Mickaele Le Ravalec-Dupin

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08/24/2006

ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-3873

EXAMINER

THORNEWELL, KIMBERLY A

ART UNIT

PAPER NUMBER

2128

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/615,772

Applicant(s)

LE RAVALEC-DUPIN ET AL.

Examiner

Kimberly Thornevell

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-19, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 20-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/10/2003</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Claims 1-5 were originally presented for examination. In a preliminary amendment dated 7/10/2003, the Applicant cancelled claims 1-5 and added claims 6-26. Currently claims 6-26 are pending in the instant application.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 7/10/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Drawings***

3. The drawings are objected to because the labels on the figures are written in French and there is no English translation provided.

#### ***Specification***

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a **single paragraph** on a separate sheet **within the range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as

Art Unit: 2128

"means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. **It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.**

5. The abstract of the disclosure is objected to because:

- it is written in more than one paragraph
- it exceeds the maximum word limit
- it includes phraseology that can be implied (i.e., "The method is based on... in line 4).

Correction is required. See MPEP § 608.01(b).

### *Claim Objections*

6. Page 6 of the claims is missing from the application. Accordingly, claims 20-24 have not been treated on the merits.

7. Claim 7 is objected to as it depends from cancelled claim 1. It is assumed by the Examiner that claim 7 is to depend from claim 6.

8. Claim 14 is objected to because "each of identified zones" should read, "each of *said* identified zones."

### *Claim Rejections - 35 USC § 112*

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

12. Claims 6-19 and 25-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claim 6 contains the limitation of identifying zones inside a reservoir. There is no indication within the claim or the disclosure how these zones are identified. Claim 7 recites, "the zones are defined either manually or automatically from the simulation of the fluid flows." Again, similar to claim 6, it is not defined in the Applicant's disclosure how the zones are defined. Furthermore, it is not defined how they are manually or automatically defined. Claims 8-19 and 25-26 are rejected because of their dependence on claim 6.

13. Claims 6-19 and 25-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 6:

Claim 6 recites the limitation "the fluid flows" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites a “related stochastic model” in line 6. It is unclear how a stochastic model is “related” to a Gaussian model.

Claim 6 recites “effective permeabilities” in line 8. The difference between the “effective permeability” and the permeability as defined in line 5 is unclear.

Claim 6 recites “corrections *to be made*” in line 9. It is unclear when or how the corrections are to be made.

Claim 6 recites, “improve calibration” in line 9. It is not clear how the calibration is initially determined, much less how it is improved.

It appears that the Applicant is attempting to invoke 35 USC 112, 6<sup>th</sup> paragraph, in line 12 (i.e., “means of an iterative optimization process.”). However, in order to invoke 35 USC 112, 6<sup>th</sup> paragraph, the claim limitation must include the phrase “means for” (see MPEP 2181). Because the phraseology presented in the claim fails to meet the three-prong test for invoking 35 USC 112, 6<sup>th</sup> paragraph, the claim cannot be interpreted to do so. Consequently, one of ordinary skill in the art cannot determine what is meant by “means of an iterative optimization process.”

Claim 6 recites “a technique of gradual deformation of *realizations of the stochastic model*” in line 16. One of ordinary skill in the art cannot determine what realizations of a stochastic model are.

As per claim 7:

It is unclear how the zones are “defined either manually or automatically,” as they have been “identified” in the independent claim.

Claims 8-19 and 25-26 are rejected because of their dependence on claim 6.

***Claim Rejections - 35 USC § 101***

14. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6-19 and 25-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 6 lacks a useful, concrete, and tangible result. The claim is directed to manipulation of ideas that are abstract in nature, as performing of the method does not result in an outcome that is, for example, displayed, stored, etc. by means of a tangible medium. Because there is no tangible result, the claim is non-statutory. Dependent claims 7-19 and 25-26 are rejected, as they also do not perform any steps that would result in a useful, concrete, and tangible result.

***Prior Art Rejections/In re Steele***

15. MPEP 2173.06 Prior Art Rejection of Claim Rejected as Indefinite recites:

"Where there is a great deal of confusion and uncertainty as to the proper interpretation of the limitations of a claim, it would not be proper to reject such a claim on the basis of prior art. As stated in *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962), a rejection under 35 U.S.C. 103 should not be based on considerable speculation about the meaning of terms employed in a claim or assumptions that must be made as to the scope of the claims."

16. Claims 6-19 and 25-26 are replete with claim formulation and 35 USC 112 errors (see exemplary rejections above). As such, it is difficult to ascertain the metes and bounds of the

Art Unit: 2128

invention the Applicants regard as their own. Consequently, no prior art rejection has been made at this time.

***Conclusion***

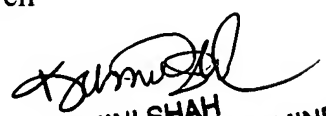
17. The prior art made of record on the form PTO-892 and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Thornewell whose telephone number is (571)272-6543. The examiner can normally be reached on 8am-4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly A. Thornewell  
Patent Examiner  
Art Unit 2128

  
KAMINI SHAH  
SUPERVISORY PATENT EXAMINER



Application/Control Number: 10/615,772

Page 8

Art Unit: 2128

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